

Appendix E Electronic Audit Information

**Clean Air Markets Division
U.S. EPA
Washington, DC 20014**

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I. Methodology to be Used for Appendix E Audits

EPA will use MDC to perform electronic audits of Appendix E units, beginning in the 1st quarter of 2006. An evaluation of the quality-assured status of emissions data will be performed in the following manner:

- For each unit that uses an Appendix E monitoring system to report quality-assured NO_x emission rate data, we will check to make sure that the unit is a peaking unit.
- For each Appendix E monitoring system used to report quality-assured data, the historical EDR data will be searched, to locate the most recent Appendix E NO_x emission test. This will be done to determine whether the monitoring system is up-to-date with respect to this QA test requirement and therefore "in-control".

In evaluating the hourly data in each quarter, an "out-of-control" status will be assigned whenever the data validation "window" is found to have expired for an Appendix E test. The out-of-control status will continue until a subsequent test is successfully completed. If no subsequent QA test is passed, the monitoring system will be considered to be out-of-control through the end of the quarter.

II. Recommended Procedures to Prepare for the Electronic Audits

The following procedures are recommended to help you to prepare for the electronic audits of Appendix E and/or Appendix D units that will begin in the first quarter of 2006:

- For each Appendix D or E unit, review your records to see when the last valid quality assurance tests were done (i.e., the last fuel flowmeter accuracy test, transmitter calibration, primary element inspection (PEI), or Appendix E NO_x emission test, as applicable). Determine whether these QA tests are active or if they have expired. Use the following guidelines:
 - Fuel flowmeter accuracy tests (which include transmitter calibrations of orifice-type meters) are required every four calendar quarters, unless the test deadline is extended, either by means of "non-QA" quarters (< 168 hours of fuel combustion) or by using the optional fuel flow-to-load ratio test in section 2.1.7 of Appendix D. Accuracy test deadlines may be extended up to 5 years (20 quarters) from the previous test, with one qualification-- when you use the "QA quarter" approach, the accuracy test is due in the earlier of the fourth QA quarter or the 20th calendar quarter after the previous test.
 - For orifice, nozzle and venture-type flowmeters, a primary element inspection (PEI) is required every 3 years (12 quarters), unless the deadline is extended (up to a maximum of 20 quarters) using the fuel flow-to-load ratio test.
 - Appendix E re-tests are required every 5 years (20 quarters), and whenever the monitored QA parameters are not within acceptable ranges (as indicated by a

parameter status flag of "N" in EDR record 323 or 324) for > 16 consecutive unit operating hours.

- If you believe that you are up-to-date with respect to all of the required QA tests, examine your historical EDR data, to be sure that you have, at a minimum, reported the results of the most recent QA tests and (if applicable) have reported all of the necessary test deadline extension claims. Here are some important "check points" regarding the fuel flow-to-load ratio test:
 - You must report flow-to-load test results (EDR records 629 and 630) every "QA quarter," for as long as you intend to claim extensions of your accuracy test deadline. Once you stop reporting the fuel flow to load test, you may not resume reporting it until you perform another accuracy test, unless you have inadvertently omitted the test results in one or more EDRs. In that case, you may submit the missing records without adverse consequences.
 - If you have an orifice, nozzle or venturi-type flowmeter that conforms to AGA Report No. 3, you must perform a complete QA sequence within the same calendar quarter before you can use the fuel flow-to-load methodology (Appendix D, section 2.1.7.1(a)). A complete QA sequence consists of transmitter calibrations plus a primary element inspection.
- If you believe that you have reported (or are prepared to report) all of the essential QA test results and extension claims, you can proceed with verifying that you pass the new MDC Hourly Appendix D Status evaluation. To do this, you must ensure that your local MDC database has been populated with all of the necessary data. In addition to QA test and extension data, you must also import or enter up to five years of quarterly operating hour and fuel operating hour data. To do this, follow these steps:
 - First, obtain the MDC CAMD Export file for your facility. These files can be accessed from the CAMD website MDC page at <http://www.epa.gov/airmarkets/monitoring/mdc/extracts2/index.html>
The MDC CAMD Export Files contain all monitoring plan, QA test data and Extensions/Exemption data that have been submitted for each facility. In addition, these files contain quarterly operating hour totals and quarterly fuel hour totals for the last five years, provided in RT 980 and 981. (These RTs were created solely for inclusion in MDC CAMD Export files to be imported into local MDC installations.)
 - Next, backup your local MDC database and then delete the existing data for the facility.
 - Then, import the MDC CAMD Export file. This will recreate EPA's version of your data as of the date of the MDC CAMD file. Finally, if you have submitted (or intend to submit) any updates or additional data since that date, import the applicable files. If this includes any prior quarters of data, be sure to import from a complete quarterly file so that the quarterly fuel hours data can be updated from RTs 302 and 303 (which will occur during the import.)

- Now that your local MDC database includes all the required data, use the Hourly module of MDC beta version 4.2.53 to check the QA status of your Appendix D and E monitoring systems.
- If you receive an MDC QA status report showing an "out-of-control" status for any of your monitoring systems, the following actions are recommended:
 - First, diagnose the problem. Determine whether the monitoring system is actually out-of-control, or whether the out-of-control status resulted from improper reporting of the accuracy test, PEI or appendix E test information.
 - If you conclude that a QA test has expired and the monitoring system is actually out-of-control, you should perform the necessary accuracy test, PEI or Appendix E test, to get back in-control as soon as possible.
 - If you find that the monitoring system is not out-of-control, but the apparent out-of-control status is the result of improper or incomplete data reporting, then:
 - (1) Identify the specific reporting deficiencies; and
 - (2) Take corrective actions by December 31, 2005, as follows:
 - If the reporting problems responsible for the out-of-control status are directly traceable to the most recent quarterly report, make the necessary corrections and resubmit that report.
 - If the out-of-control status is triggered by improperly reported data or incomplete data in earlier EDRs (possibly going back to previous years), it is not necessary to resubmit all of the past reports. Rather, you should either resubmit the most recent EDR, including in it all of the missing and corrected data, or submit the missing and corrected information in your next EDR.
- If you believe that the MDC evaluation of the QA status is in error for a particular unit or stack, or that there is a "bug" in the MDC, please contact Kim Nguyen at 202-343-9102, or nguyen.kim@epa.gov.
- You can use the "Edit" mode of MDC to create missing QA records or to edit existing records. You can then export the records and use a text editor to add them to your EDR. An example of how to use the Edit mode to create and export QA records is given in Section III, below.

III. Example: Reporting Appendix E Test Data

Background

At our "Appendix D and E" facility (ORIS code 1), we have a combustion turbine, Unit CT01, that is in the Acid Rain Program. The turbine meets the definition of a "peaking unit", under 40 CFR Part 72. We burn mainly natural gas in CT01, and occasionally fire diesel oil. There are no CEM systems on CT01. We use the "excepted" methodologies in Appendices D, E, and G of Part 75 to account for Unit CT01's SO₂, NO_x, and CO₂ emissions. Unit CT01 has two certified Appendix D fuel flowmeter systems, one for oil (system ID # OS1) and one for gas (system ID # GS1).

Unit CT01 first came on line in the 2nd quarter of 2000. At that time, we did all of the tests required by Appendix D to certify the fuel flowmeters. We also conducted the four-load NO_x emission testing required by Appendix E, in order to construct correlation curves of NO_x emission rate versus heat input rate. We derived separate correlation curves for natural gas combustion and oil combustion and programmed them into our DAHS. In our monitoring plan, they are represented as two separate Appendix E monitoring systems, with ID numbers of "NX1" (for natural gas) and "NX2" (for oil).

Appendix E testing is required once every five years (20 calendar quarters). Since our initial testing was done in the 2nd quarter of 2000, the deadline for re-testing was the end of the 2nd quarter of 2005 (i.e., 6/30/05). We re-tested CT01 in March, 2005, one quarter before the deadline.

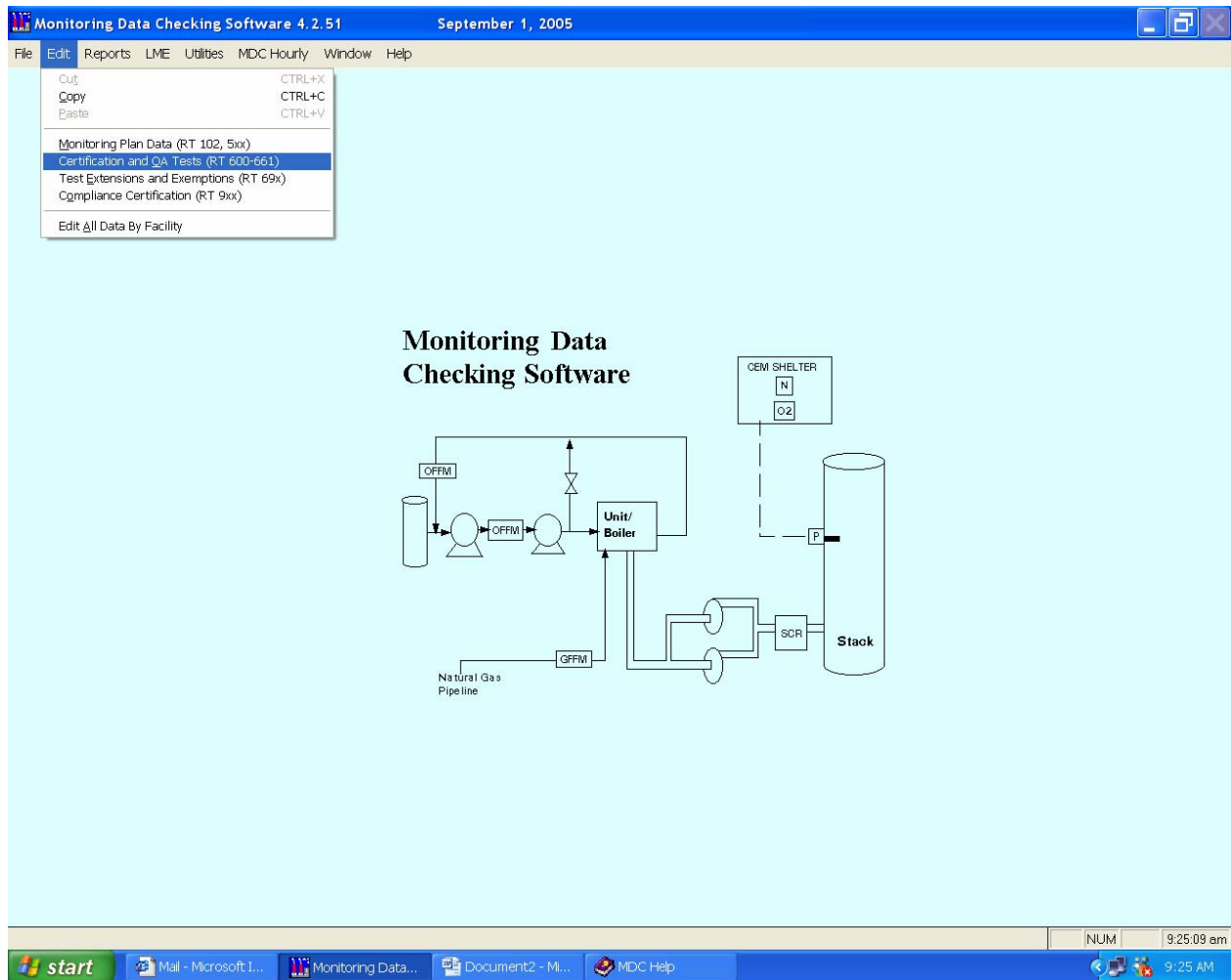
Recently, during an in-house audit of our Part 75 electronic data reports (EDRs) for 2005, we discovered that we had neglected to report the results of our 1st quarter, 2005 Appendix E re-tests to EPA.

We contacted the Clean Air Markets Division (CAMD) and were advised that we could either report the missing QA test records in our next (3rd quarter, 2005) EDR report, or we could resubmit the 1st and 2nd quarter EDRs and include the test results in the 1st quarter report. We read through the EDR Reporting Instructions and determined that we would need to generate the following five EDR record types to straighten out our Appendix E QA history:

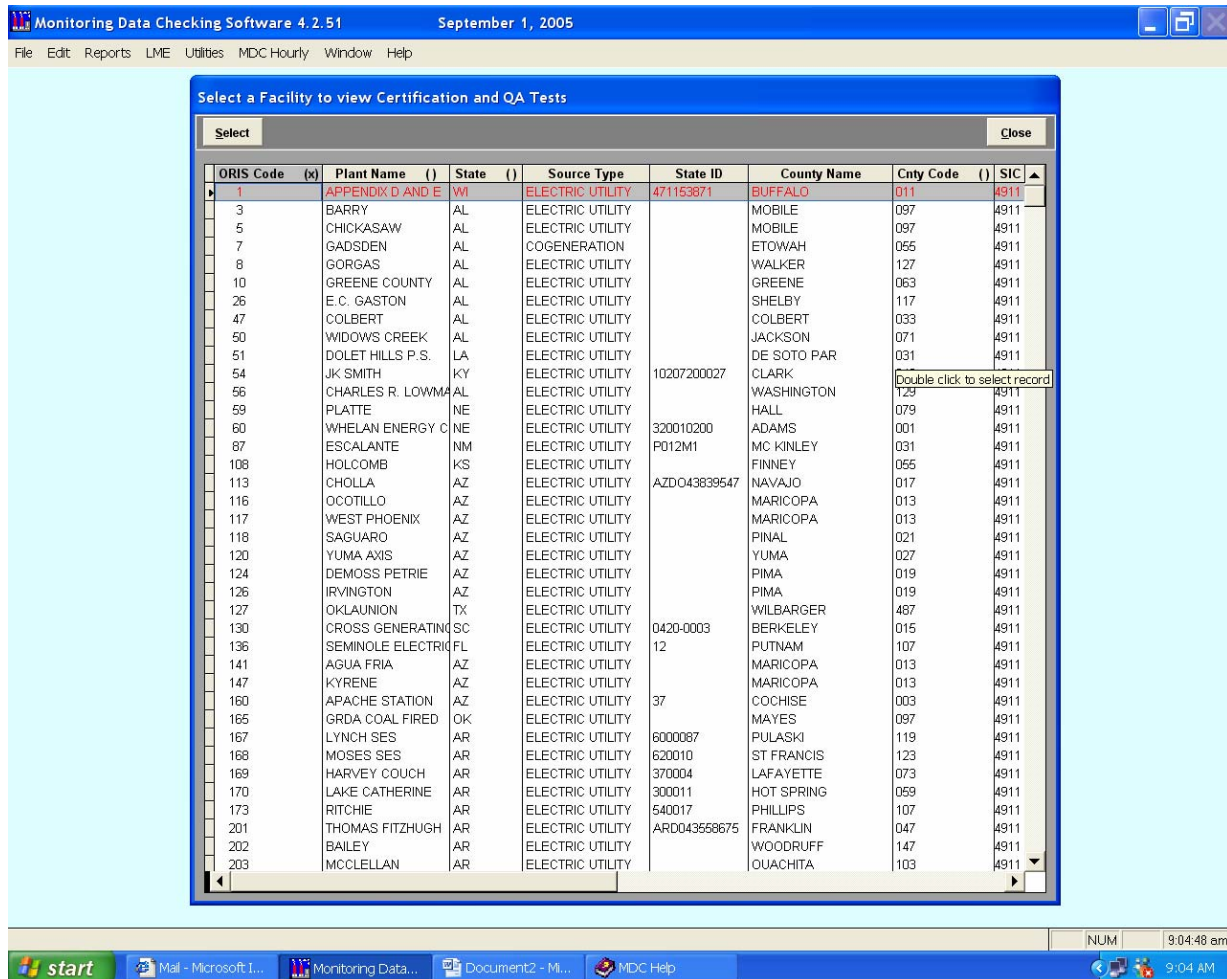
- RT 650, to report the results of the individual Appendix E test runs;
- RT 651, to summarize the test results at each load level;
- RT 652, to report the heat input information for the oil test; and
- RT 653, to report the heat input information for the natural gas test.
- RT 560, to report the correlation curve segments.

We decided to create the necessary records using MDC and then add them to our 3rd quarter, 2005 EDR report. The following series of screens shows how we used MDC to create the missing QA records for the Appendix E re-test on natural gas.

In order to access data entry screens for record types 650, 651, and 653, which are required for the natural gas re-test, we began by selecting the "Certification and QA Tests" option in the "Edit" mode on the main menu of MDC, as shown below.



Next, we selected the "Appendix D and E" facility by double clicking on it. The "Select a Test for Appendix D and E" screen appeared.



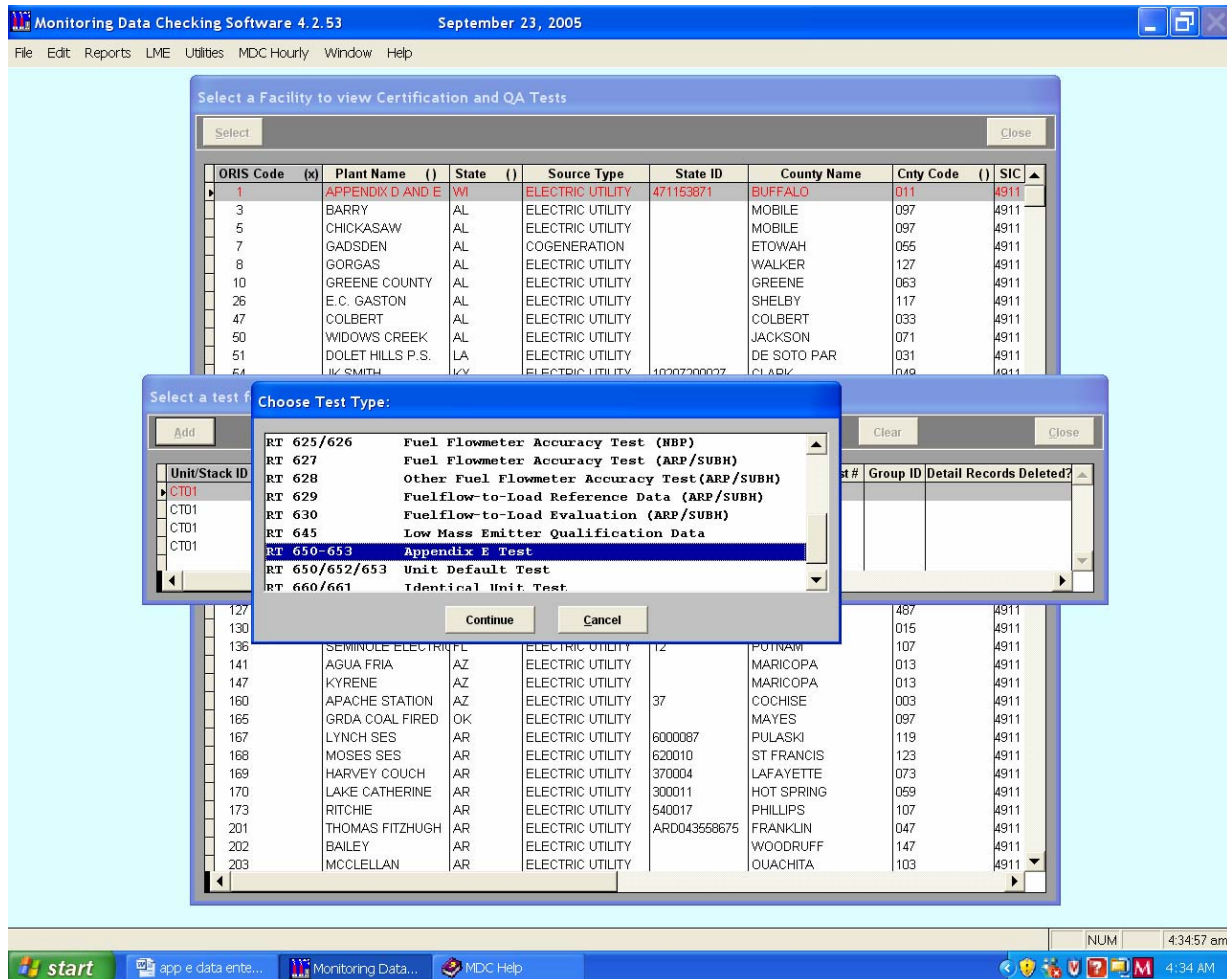
The "Select a Test for Appendix D and E" screen allows you to edit or delete an existing QA Test for a facility, or to add a new QA Test. In our case, since the results of the March, 2005 Appendix E re-test of system NX1 were not in our MDC database (the screen below shows only the initial test from 2000), we needed to use the "Add" function. First, we created the 650 records for the individual test runs. We began by clicking on the "Add" button. The "Choose Test Type" window appeared.

The screenshot shows the 'Monitoring Data Checking Software 4.2.53' interface. The main window is titled 'Select a Facility to view Certification and QA Tests'. It contains a table with the following columns: ORIS Code, Plant Name, State, Source Type, State ID, County Name, Cnty Code, and SIC. The table lists several facilities, including BARRY, CHICKASAW, GADSDEN, GORGAS, GREENE COUNTY, and E.C. GASTON.

Below the main window, a smaller window titled 'Select a test for APPENDIX D AND E (1)' is open. It has buttons for 'Add', 'Delete', 'Edit', 'Filter', 'Clear', and 'Close'. The table in this window has columns: Unit/Stack ID, Sys ID, Param, Comp ID, Type, Test Type, Reason, Test Date, Test #, Group ID, and Detail Records Deleted?. The table shows two rows of test data for Unit/Stack ID CT01, with Test Dates of 04/04/2000 and 04/30/2000.

The bottom of the screenshot shows the Windows taskbar with the 'start' button and several open applications: 'Monitoring Data...', 'Mail - Microsoft I...', and 'app e data ente...'. The system clock shows '5:27 PM'.

We selected "RT 650-653 (Appendix E Test)" and clicked on the "Continue" button. The Appendix E data entry form then appeared.



We selected the "Run Records (RT 650)" tab and pressed the "Add" button to enter the data for the first test run.

The screenshot displays the 'Monitoring Data Checking Software 4.2.53' interface. The main window shows a list of facilities with columns: ORIS Code, Plant Name, State, Source Type, State ID, County Name, Cnty Code, and SIC. A facility named 'APPENDIX D AND E' is selected. Overlaid on this is the 'Appendix E Data Entry Form for APPENDIX D AND E'. This form contains fields for ORIS Code (1), Plant Name (APPENDIX D AND E), Unit/Pipe ID (C101), NOx Monitoring System ID (NX1), Test # (1), Start Date, Time, End Date, Time, Fuel Type (Natural gas), and Evaluation Criteria (Acid Rain Program/Subpart H Criteria). Below these fields are buttons for 'Evaluate', 'Exit', and 'Help'. A 'Run Records (RT 650)' tab is active, showing a table with columns: Op Lvl, Run #, End Date, End Time, NOx Rate, and Heat Input Rate. An 'Add' button is visible next to the table. The Windows taskbar at the bottom shows the start button and several open applications, including 'app e data ente...', 'Monitoring Data...', and 'MDC Help'. The system clock indicates 4:39:51 am on September 23, 2005.

ORIS Code	Plant Name	State	Source Type	State ID	County Name	Cnty Code	SIC
1	APPENDIX D AND E	WI	ELECTRIC UTILITY	471153871	BUFFALO	011	4911
3	BARRY	AL	ELECTRIC UTILITY		MOBILE	097	4911
5	CHICKASAW	AL	ELECTRIC UTILITY		MOBILE	097	4911
7	GADSDEN	AL	COGENERATION		ETOWAH	055	4911
8	GORGAS	AL	ELECTRIC UTILITY		WALKER	127	4911
10							4911
26							4911
47							4911
50							4911
51							4911
54							4911
127							4911
130							4911
136							4911
141							4911
147							4911
160							4911
165							4911
167	LYNCH SES	AR	ELECTRIC UTILITY	6000087	PULASKI	119	4911
168	MOSES SES	AR	ELECTRIC UTILITY	620010	ST FRANCIS	123	4911
169	HARVEY COUCH	AR	ELECTRIC UTILITY	370004	LAFAYETTE	073	4911
170	LAKE CATHERINE	AR	ELECTRIC UTILITY	300011	HOT SPRING	059	4911
173	RITCHIE	AR	ELECTRIC UTILITY	540017	PHILLIPS	107	4911
201	THOMAS FITZHUGH	AR	ELECTRIC UTILITY	ARD043558675	FRANKLIN	047	4911
202	BAILEY	AR	ELECTRIC UTILITY		WOODRUFF	147	4911
203	MCCLELLAN	AR	ELECTRIC UTILITY		OUACHITA	103	4911

The screen below displays the data for the first test run at Operating Level 1. We pressed the "Calculate" button to compare our reported total heat input and heat input rate values to the values recalculated by MDC. For this run, the recalculated MDC values were identical to ours (see below). However, if our values had been in error, we could have pressed the "Replace" button to correct them. After we were satisfied that the data for Run # 1 were correct, we saved it. We repeated the data entry steps for the rest of the test runs until all twelve runs of the test (i.e., four load levels with three runs each) had been entered.

The screenshot displays the Monitoring Data Checking Software 4.2.53 interface. The main window shows a table of facilities with columns: ORIS Code, Plant Name, State, Source Type, State ID, County Name, Cnty Code, and SIC. A dialog box titled "Run Records Data Entry Form (RT 650)" is open, showing the following data:

Field	Value
ORIS Code	1
Plant Name	APPENDIX D AND E
Unit/Pipe ID	CT01
NOx Monitoring System ID	NX1
Test #	1
Operating Level	1
Run #	1
Run Start Date	03/18/2005
Run Start Time (HHMM)	0858
Run End Date	03/18/2005
Run End Time (HHMM)	0922
Response Time (Seconds)	2
NOx Rate (lb/mmBtu)	0.032
Total Heat Input (mmBtu)	476.6
Heat Input Rate (mmBtu/hr)	1191.5

The dialog box also includes buttons for "Calculate", "Replace", "Exit", and "Help". A "Select a Facility" dialog box is also visible in the background.

Next, we used MDC to generate the four RTs 651, summarizing the test results at each of the load levels. To do this, we selected the "Results Records (RT 651)" tab on the Appendix E data entry form and pressed the "Add" button.

Monitoring Data Checking Software 4.2.53 September 23, 2005

File Edit Reports LME Utilities MDC Hourly Window Help

Select a Facility to view Certification and QA Tests

ORIS Code	Plant Name	State	Source Type	State ID	County Name	Cnty Code	SIC
1	APPENDIX D AND E	WI	ELECTRIC UTILITY	471153871	BUFFALO	011	4911
3	BARRY	AL	ELECTRIC UTILITY		MOBILE	097	4911
5	CHICKASAW	AL	ELECTRIC UTILITY		MOBILE	097	4911
7	GADSDEN	AL	COGENERATION		ETOWAH	055	4911
8	GORGAS	AL	ELECTRIC UTILITY		WALKER	127	4911

Appendix E Data Entry Form for APPENDIX D AND E

ORIS Code: 1 Plant Name: APPENDIX D AND E Unit/Pipe ID: CT01

NOx Monitoring System ID: NX1 Test #: 1

Start Date: 03/18/2005 Time: 0858 End Date: 03/21/2005 Time: 1755

Fuel Type: Pipeline natural gas

Evaluation Criteria: Acid Rain Program/Subpart H Criteria Evaluate Exit Help

Run Records (RT 650) Results Records (RT 651) RT 652 - N/A Gas Flow Records (RT 653)

Op Level	End Date	End Time	NOx Rate	Heat Input Rate

Add Edit Remove Help

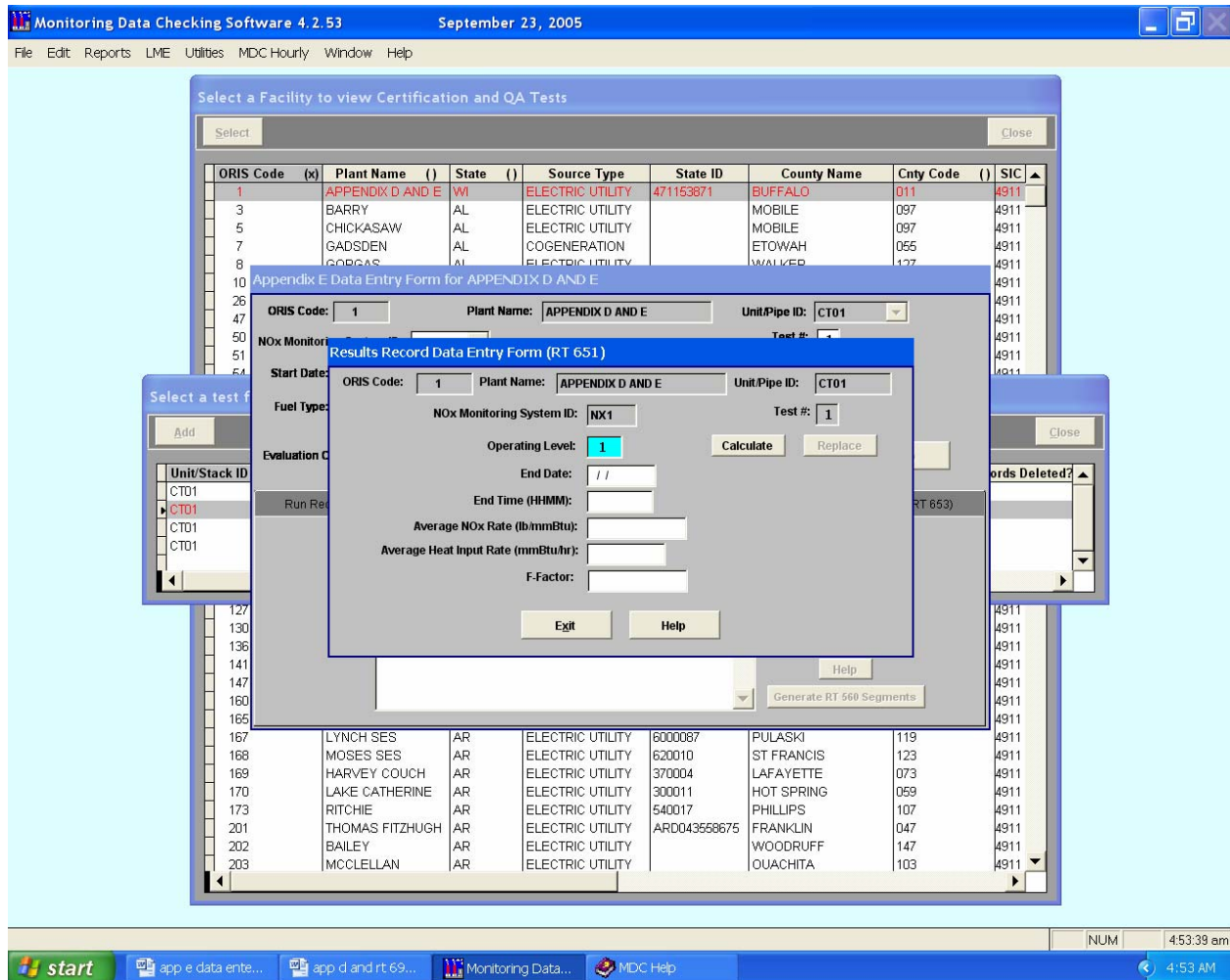
Generate RT 560 Segments

ORIS Code	Plant Name	State	Source Type	State ID	County Name	Cnty Code	SIC
127	LYNCH SES	AR	ELECTRIC UTILITY	6000087	PULASKI	119	4911
130	MOSES SES	AR	ELECTRIC UTILITY	620010	ST FRANCIS	123	4911
136	HARVEY COUCH	AR	ELECTRIC UTILITY	370004	LAFAYETTE	073	4911
141	LAKE CATHERINE	AR	ELECTRIC UTILITY	300011	HOT SPRING	059	4911
147	RITCHIE	AR	ELECTRIC UTILITY	540017	PHILLIPS	107	4911
160	THOMAS FITZHUGH	AR	ELECTRIC UTILITY	ARD043558675	FRANKLIN	047	4911
165	BAILEY	AR	ELECTRIC UTILITY		WOODRUFF	147	4911
167	MCCLELLAN	AR	ELECTRIC UTILITY		OUACHITA	103	4911

start app e data ente... app d and rt 69... Monitoring Data... MDC Help

NUM 4:51:01 am 4:51 AM

We entered the Operating Level (see below), and then we had a choice of either filling out the rest of the RT 651 information (based on our calculations) or allowing the software to generate the RT 651 data automatically. We decided to let MDC generate the RT 651 data, and pressed the "Calculate" button.



Based on the RT 650 information, MDC calculated and displayed the RT 651 summarized test results (see test results for Operating Level 1, below).

The screenshot displays the Monitoring Data Checking Software 4.2.53 interface. The main window shows a table of facilities with columns: ORIS Code, Plant Name, State, Source Type, State ID, County Name, Cnty Code, and SIC. A dialog box titled "Results Record Data Entry Form (RT 651)" is open, showing test results for plant APPENDIX D AND E, Unit/Pipe ID: CT01, and Test #: 1. The form includes fields for Start Date, Fuel Type, Evaluation C, Run Res, NOx Monitoring System ID, Operating Level, End Date, End Time (HHMM), Average NOx Rate (lb/mmBtu), Average Heat Input Rate (mmBtu/hr), and F-Factor. The calculated results are: Average NOx Rate: 0.034 and Average Heat Input Rate: 1185.6. The background table lists various plants, including BARRY, CHICKASAW, GADSDEN, GORGAS, LYNCH SES, MOSES SES, HARVEY COUCH, LAKE CATHERINE, RITCHIE, THOMAS FITZHUGH, BAILEY, and MCCLELLAN.

ORIS Code	Plant Name	State	Source Type	State ID	County Name	Cnty Code	SIC
1	APPENDIX D AND E	WI	ELECTRIC UTILITY	471153871	BUFFALO	011	4911
3	BARRY	AL	ELECTRIC UTILITY		MOBILE	097	4911
5	CHICKASAW	AL	ELECTRIC UTILITY		MOBILE	097	4911
7	GADSDEN	AL	COGENERATION		ETOWAH	055	4911
8	GORGAS	AL	ELECTRIC UTILITY		WALKER	127	4911
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130							4911
136							4911
141							4911
147							4911
160							4911
165							4911
167	LYNCH SES	AR	ELECTRIC UTILITY	6000087	PULASKI	119	4911
168	MOSES SES	AR	ELECTRIC UTILITY	620010	ST FRANCIS	123	4911
169	HARVEY COUCH	AR	ELECTRIC UTILITY	370004	LAFAYETTE	073	4911
170	LAKE CATHERINE	AR	ELECTRIC UTILITY	300011	HOT SPRING	059	4911
173	RITCHIE	AR	ELECTRIC UTILITY	540017	PHILLIPS	107	4911
201	THOMAS FITZHUGH	AR	ELECTRIC UTILITY	ARD043558675	FRANKLIN	047	4911
202	BAILEY	AR	ELECTRIC UTILITY		WOODRUFF	147	4911
203	MCCLELLAN	AR	ELECTRIC UTILITY		OUACHITA	103	4911

We then pressed the "Replace" button, and MDC entered the test results into the RT 651 data entry form, as shown below. Finally, we completed the RT 651 form by entering the F-Factor for the test. Then we pressed the "Exit" button, and saved the data. We repeated the same RT 651 data entry procedures for Operating Levels 2, 3 and 4.

The screenshot displays the Monitoring Data Checking Software 4.2.53 interface. The main window shows a table of facilities with columns: ORIS Code, Plant Name, State, Source Type, State ID, County Name, Cnty Code, and SIC. A dialog box titled "Appendix E Data Entry Form for APPENDIX D AND E" is open, showing the "Results Record Data Entry Form (RT 651)".

The RT 651 form contains the following fields and values:

- ORIS Code: 1
- Plant Name: APPENDIX D AND E
- Unit/Pipe ID: CT01
- Test #: 1
- NOx Monitoring System ID: NX1
- Operating Level: 1
- Start Date: 03/18/2005
- End Time (HHMM): 1454
- Average NOx Rate (lb/mmBtu): 0.034
- Average Heat Input Rate (mmBtu/hr): 1185.6
- F-Factor: 8644.0

Buttons for "Calculate", "Replace", "Exit", and "Help" are visible. A "Generate RT 560 Segments" button is also present at the bottom of the form.

The background table lists various facilities, including:

ORIS Code	Plant Name	State	Source Type	State ID	County Name	Cnty Code	SIC
1	APPENDIX D AND E	WI	ELECTRIC UTILITY	471153871	BUFFALO	011	4911
3	BARRY	AL	ELECTRIC UTILITY		MOBILE	097	4911
5	CHICKASAW	AL	ELECTRIC UTILITY		MOBILE	097	4911
7	GADSDEN	AL	COGENERATION		ETOWAH	055	4911
8	GORGAS	AL	ELECTRIC UTILITY		WALKER	127	4911
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168	MOSES SES	AR	ELECTRIC UTILITY	620010	ST FRANCIS	123	4911
169	HARVEY COUCH	AR	ELECTRIC UTILITY	370004	LAFAYETTE	073	4911
170	LAKE CATHERINE	AR	ELECTRIC UTILITY	300011	HOT SPRING	069	4911
173	RITCHIE	AR	ELECTRIC UTILITY	540017	PHILLIPS	107	4911
201	THOMAS FITZHUGH	AR	ELECTRIC UTILITY	ARD043558675	FRANKLIN	047	4911
202	BAILEY	AR	ELECTRIC UTILITY		WOODRUFF	147	4911
203	MCCLELLAN	AR	ELECTRIC UTILITY		OUACHITA	103	4911

Next, we selected the "Gas Flow Records (RT 653)" tab on the Appendix E data entry form. We pressed the "Add" button and the RT 653 data entry screen appeared.

Monitoring Data Checking Software 4.2.53 September 27, 2005

File Edit Reports LME Utilities MDC Hourly Window Help

Select a Facility to view Certification and QA Tests

Select Close

ORIS Code (x)	Plant Name ()	State ()	Source Type	State ID	County Name	Cnty Code ()	SIC
1	APPENDIX D AND E	WI	ELECTRIC UTILITY	471153871	BUFFALO	011	4911
3	BARRY	AL	ELECTRIC UTILITY		MOBILE	097	4911
5	CHICKASAW	AL	ELECTRIC UTILITY		MOBILE	097	4911
7	GADSDEN	AL	COGENERATION		ETOWAH	055	4911
8	GORGAS	AL	ELECTRIC UTILITY		WALKER	127	4911
10							4911
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47							4911
50							4911
51							4911
54							4911
127							4911
130							4911
136							4911
141							4911
147							4911
160							4911
165							4911
167	LYNCH SES	AR	ELECTRIC UTILITY	6000087	PULASKI	119	4911
168	MOSES SES	AR	ELECTRIC UTILITY	620010	ST FRANCIS	123	4911
169	HARVEY COUCH	AR	ELECTRIC UTILITY	370004	LAFAYETTE	073	4911
170	LAKE CATHERINE	AR	ELECTRIC UTILITY	300011	HOT SPRING	059	4911
173	RITCHIE	AR	ELECTRIC UTILITY	540017	PHILLIPS	107	4911
201	THOMAS FITZHUGH	AR	ELECTRIC UTILITY	ARD043558675	FRANKLIN	047	4911
202	BAILEY	AR	ELECTRIC UTILITY		WOODRUFF	147	4911
203	MCCLELLAN	AR	ELECTRIC UTILITY		OUACHITA	103	4911

Appendix E Data Entry Form for APPENDIX D AND E

ORIS Code: 1 Plant Name: APPENDIX D AND E Unit/Pipe ID: CT01

NOx Monitoring System ID: NX1 Test #: 1

Start Date: 03/18/2005 Time: 0858 End Date: 03/21/2005 Time: 1755

Fuel Type: Pipeline natural gas

Evaluation Criteria: Acid Rain Program/Subpart H Criteria Evaluate Exit Help

Run Records (RT 650) Results Records (RT 651) RT 652 - N/A Gas Flow Records (RT 653)

Op Lvl	Run#	End Date	End Time	Fuel System ID	Total Heat Input	Gas Flow

Add Edit Remove Help

Double-Click to edit a record

Right click to select and de-select records

NUM 5:58:23 pm

start app.e data ente... MDC4 test2 - Notepad Monitoring Data...

5:58 PM

We entered the gas flow data for the first run at Operating Level 1 (see below). We pressed the "Calculate" button to make sure that our total heat input calculation was correct.

The screenshot displays the Monitoring Data Checking Software 4.2.53 interface. The main window shows a table of facilities with columns: ORIS Code, Plant Name, State, Source Type, State ID, County Name, Cnty Code, and SIC. A modal window titled "Gas Flow Data Entry Form (RT 653)" is open, showing the following data:

Field	Value
ORIS Code	1
Plant Name	APPENDIX D AND E
Unit/Pipe ID	CT01
NOx Monitoring System ID	NX1
Test #	1
Operating Level	1
Run #	1
Run Start Date	03/18/2005
Run Start Time (HHMM)	0858
Run End Date	03/18/2005
Run End Time (HHMM)	0922
Fuel System ID	GS1
Gross Calorific Value (Btu/100 scf)	100320.0
Gas Flow (100 scf)	4750.9
Total Heat Input (mmBtu)	476.6

The "Calculate" button is highlighted, indicating it was pressed to verify the total heat input calculation. The background table lists various facilities, including those in Alabama (AL) and Arkansas (AR).

We then entered the gas flow data for the other 11 runs, checking our calculations and replacing incorrect heat input values, as necessary.

After entering all of the data for system NX1, we repeated the entire data entry process for the Appendix E test of system NX2, the only difference being that we filled out RTs 652 for oil combustion instead of RT 653.

Monitoring Data Checking Software 4.2.53 September 27, 2005

File Edit Reports LME Utilities MDC Hourly Window Help

Select a Facility to view Certification and QA Tests

Select

ORIS Code	Plant Name	State	Source Type	State ID	County Name	Cnty Code	SIC
1	APPENDIX D AND E	VI	ELECTRIC UTILITY	471153871	BUFFALO	011	4911
3	BARRY	AL	ELECTRIC UTILITY		MOBILE	097	4911
5	CHICKASAW	AL	ELECTRIC UTILITY		MOBILE	097	4911
7	GADSDEN	AL	COGENERATION		ETOWAH	055	4911
8	GORGAS	AL	ELECTRIC UTILITY		WALKER	137	4911
10							4911
26							4911
47							4911
50							4911
51							4911
54							4911
127							4911
130							4911
136							4911
141							4911
147							4911
160							4911
165							4911
167	LYNCH SES	AR	ELECTRIC UTILITY	6000087	PULASKI	119	4911
168	MOSES SES	AR	ELECTRIC UTILITY	620010	ST FRANCIS	123	4911
169	HARVEY COUCH	AR	ELECTRIC UTILITY	370004	LAFAYETTE	073	4911
170	LAKE CATHERINE	AR	ELECTRIC UTILITY	300011	HOT SPRING	059	4911
173	RITCHIE	AR	ELECTRIC UTILITY	540017	PHILLIPS	107	4911
201	THOMAS FITZHUGH	AR	ELECTRIC UTILITY	ARD043558675	FRANKLIN	047	4911
202	BAILEY	AR	ELECTRIC UTILITY		WOODRUFF	147	4911
203	MCCLELLAN	AR	ELECTRIC UTILITY		OUACHITA	103	4911

Appendix E Data Entry Form for APPENDIX D AND E

ORIS Code: 1 Plant Name: APPENDIX D AND E Unit/Pipe ID: CT01

NOx Monitoring System ID: NX2 Test #: 1

Start Date: 03/22/2005 Time: 0920 End Date: 03/22/2005 Time: 1947

Fuel Type: Diesel Fuel

Evaluation Criteria: Acid Rain Program/Subpart H Criteria Evaluate Exit Help

Run Records (RT 650) Results Records (RT 651) Oil Flow Records (RT 652) RT 653 - N/A

Op Lvl	Run #	End Date	End Time	NOx Rate	Heat Input Rate
1	1	03/22/2005	0943	0.156	1156.6
1	2	03/22/2005	1305	0.156	1151.2
1	3	03/22/2005	1343	0.156	1152.1
2	1	03/22/2005	1428	0.155	1340.1
2	2	03/22/2005	1506	0.155	1338.5
2	3	03/22/2005	1544	0.154	1339.0
3	1	03/22/2005	1633	0.147	1596.9
3	2	03/22/2005	1710	0.146	1595.3
3	3	03/22/2005	1747	0.146	1594.5

Add Edit Remove Help

Double-Click to edit a record

Right click to select and de-select records

start app e data ente... MDC4 test2 - Notepad Monitoring Data... NUM 6:01:34 pm 6:01 PM

Next, we used MDC to generate the correlation curve segments (RTs 560) for systems NX1 and NX2, in succession. We returned to the Appendix E data entry form and selected the "Results Records (RT 651)" tab. Then, we pressed the "Generate RT 560 Segments" button.

Monitoring Data Checking Software 4.2.53 September 23, 2005

File Edit Reports LME Utilities MDC Hourly Window Help

Select a Facility to view Certification and QA Tests

Select Close

ORIS Code	Plant Name	State	Source Type	State ID	County Name	Cnty Code	SIC
1	APPENDIX D AND E	WI	ELECTRIC UTILITY	471153871	BUFFALO	011	4911
3	BARRY	AL	ELECTRIC UTILITY		MOBILE	097	4911
5	CHICKASAW	AL	ELECTRIC UTILITY		MOBILE	097	4911
7	GADSDEN	AL	COGENERATION		ETOWAH	055	4911
8	GORGAS	AL	ELECTRIC UTILITY		WALKER	127	4911

Appendix E Data Entry Form for APPENDIX D AND E

ORIS Code: 1 Plant Name: APPENDIX D AND E Unit/Pipe ID: CT01

NOx Monitoring System ID: NX1 Test #: 1

Start Date: 03/18/2005 Time: 0858 End Date: 03/21/2005 Time: 1755

Fuel Type: Pipeline natural gas

Evaluation Criteria: Acid Rain Program/Subpart H Criteria Evaluate Exit Help

Run Records (RT 650) Results Records (RT 651) RT 652 - N/A Gas Flow Records (RT 653)

Op Level	End Date	End Time	NOx Rate	Heat Input Rate
1	03/18/2005	1454	0.03	1185.6
2	03/18/2005	1707	0.03	1387.5
3	03/21/2005	1555	0.03	1614.0
4	03/21/2005	1755	0.03	1832.3

Add Edit Remove Help

Generate RT 560 Segments

Unit/Stack ID	Plant Name	State	Source Type	State ID	County Name	Cnty Code	SIC
CT01	LYNCH SES	AR	ELECTRIC UTILITY	6000087	PULASKI	119	4911
CT01	MOSES SES	AR	ELECTRIC UTILITY	620010	ST FRANCIS	123	4911
CT01	HARVEY COUCH	AR	ELECTRIC UTILITY	370004	LAFAYETTE	073	4911
CT01	LAKE CATHERINE	AR	ELECTRIC UTILITY	300011	HOT SPRING	059	4911
CT01	RITCHIE	AR	ELECTRIC UTILITY	540017	PHILLIPS	107	4911
CT01	THOMAS FITZHUGH	AR	ELECTRIC UTILITY	ARD043558675	FRANKLIN	047	4911
CT01	BAILEY	AR	ELECTRIC UTILITY		WOODRUFF	147	4911
CT01	MCCLELLAN	AR	ELECTRIC UTILITY		OUACHITA	103	4911

start app e data ente... app d and rt 69... Monitoring Data... MDC Help NUM 5:05:48 am 5:05 AM

Monitoring Data Checking Software 4.2.53 September 23, 2005

File Edit Reports LME Utilities MDC Hourly Window Help

Select a Facility to view Certification and QA Tests

Select Close

ORIS Code (x)	Plant Name ()	State ()	Source Type	State ID	County Name	Cnty Code ()	SIC
1	APPENDIX D AND E	WI	ELECTRIC UTILITY	471153871	BUFFALO	011	4911
3	BARRY	AL	ELECTRIC UTILITY		MOBILE	097	4911
5	CHICKASAW	AL	ELECTRIC UTILITY		MOBILE	097	4911
7	GADSDEN	AL	COGENERATION		ETOWAH	055	4911
8	GORGAS	AL	ELECTRIC UTILITY		WALKER	127	4911
10							4911
26							4911
47							4911
50							4911
51							4911
54							4911

Appendix E Data Entry Form for APPENDIX D AND E

Appendix E Segment ID Assignment

Test #: 1 Test End Date: 03/21/2005 Fuel Type: Pipeline natural gas

ORIS Code	Unit/Pipe ID	System ID	Segment ID	Operating Level	Nox Rate #1	Nox Rate #2	Heat Input
1	CTD1	NX1		0	0.034	0.034	0.0
1	CTD1	NX1		1	0.034	0.035	1185.6
1	CTD1	NX1		2	0.035	0.038	1387.5
1	CTD1	NX1		3	0.038	0.039	1614.0

To generate segment records, you must enter unique three character Segment IDs then press Continue.

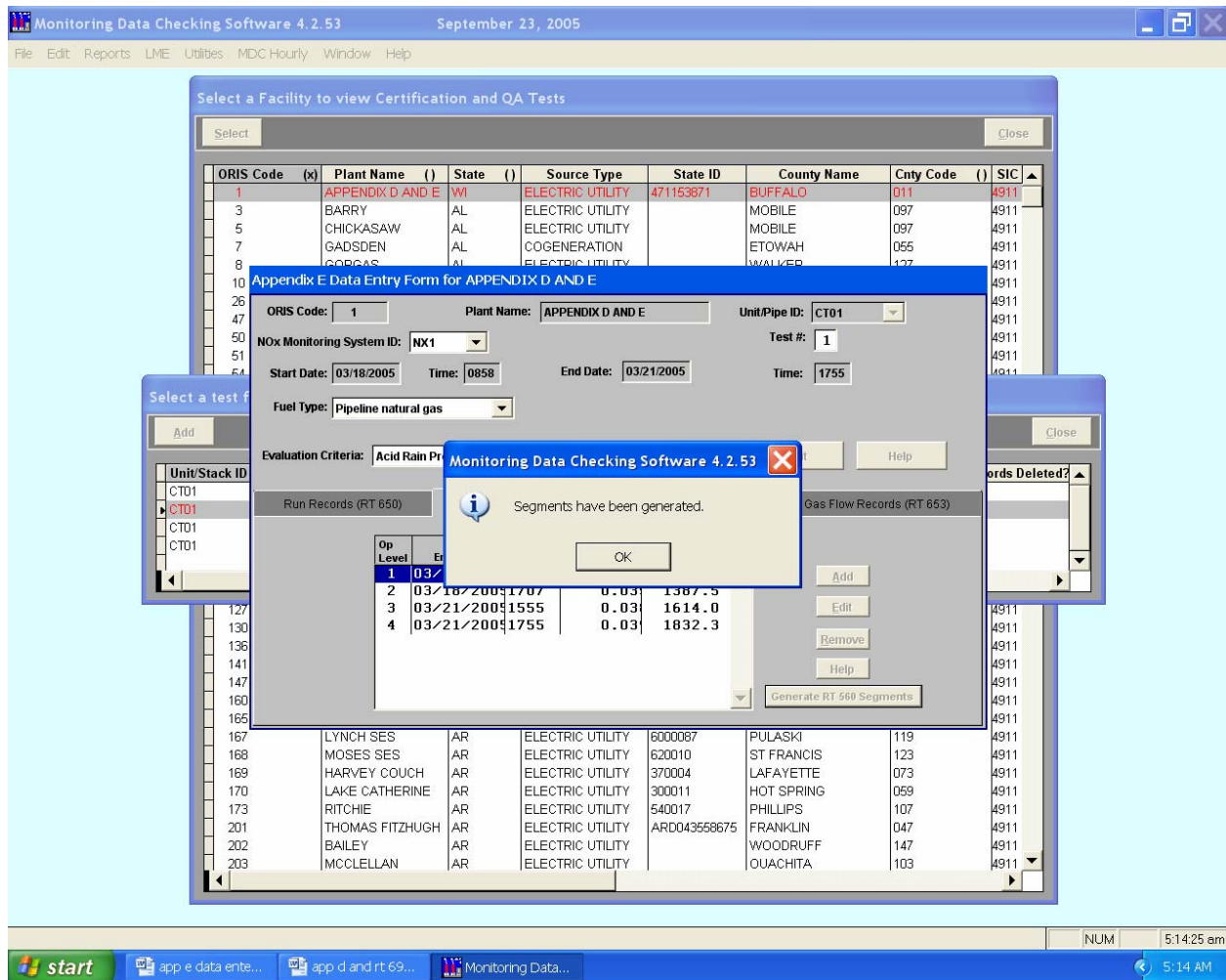
Continue Cancel

Generate New Segments

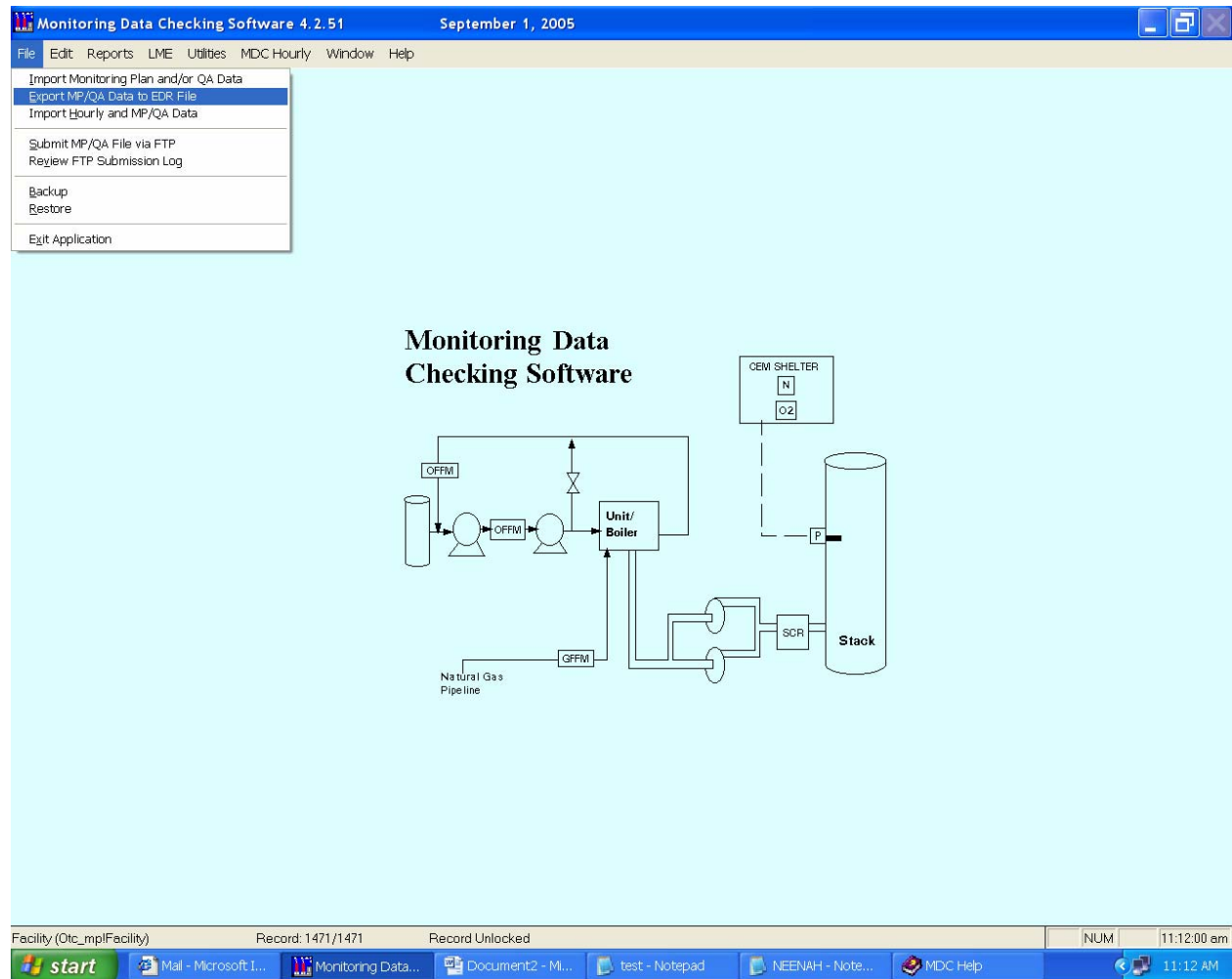
ORIS Code	Plant Name	State	Source Type	State ID	County Name	Cnty Code	SIC
127	LYNCH SES	AR	ELECTRIC UTILITY	6000087	PULASKI	119	4911
130	MOSES SES	AR	ELECTRIC UTILITY	620010	ST FRANCIS	123	4911
136	HARVEY COUCH	AR	ELECTRIC UTILITY	370004	LAFAYETTE	073	4911
141	LAKE CATHERINE	AR	ELECTRIC UTILITY	300011	HOT SPRING	059	4911
147	RITCHIE	AR	ELECTRIC UTILITY	540017	PHILLIPS	107	4911
160	THOMAS FITZHUGH	AR	ELECTRIC UTILITY	ARD043558675	FRANKLIN	047	4911
165	BAILEY	AR	ELECTRIC UTILITY		WOODRUFF	147	4911
167	MCCLELLAN	AR	ELECTRIC UTILITY		OUACHITA	103	4911

start app e data ente... app d and rt.69... Monitoring Data... NUM 5:09:44 am 5:09 AM

MDC confirmed that the segments were generated.



After entering all of the Appendix E test data into MDC and generating the curve segments, we exported the data into an EDR file. From the "File" menu option, we selected "Export MP/QA Data to EDR File."



We selected the "Appendix D and E" facility by double-clicking on it. (Note: we could also have highlighted the facility using a single right mouse click and then pressing the "Export" button). The "Export Options" screen appeared.

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File Edit Reports LME Utilities MDC Hourly Window Help

Select One or More Facilities to Export

Select All Export Filter Clear Close

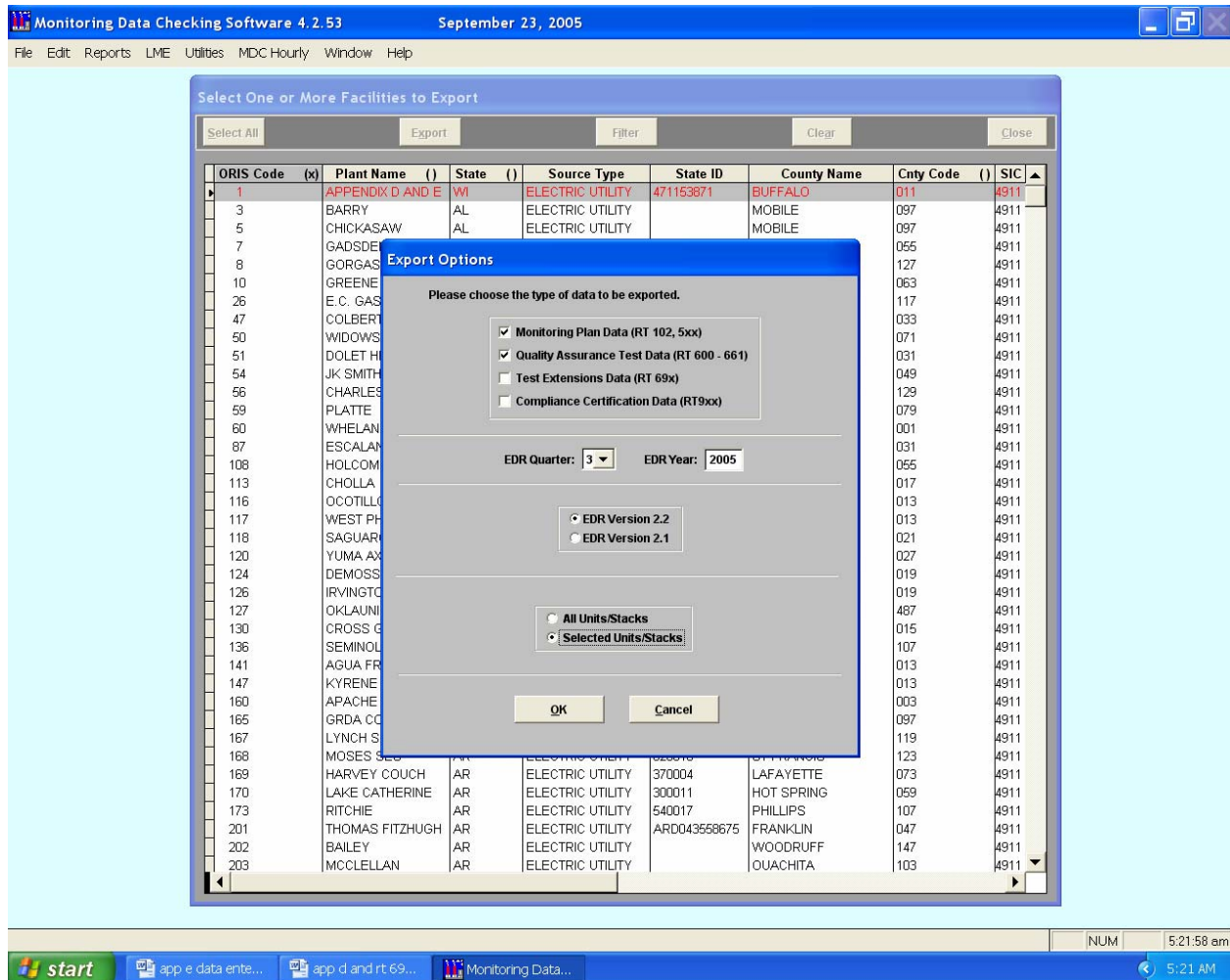
ORIS Code	Plant Name	State	Source Type	State ID	County Name	Cnty Code	SIC
1	APPENDIX D AND E	WI	ELECTRIC UTILITY	471153871	BUFFALO	011	4911
3	BARRY	AL	ELECTRIC UTILITY		MOBILE	097	4911
5	CHICKASAW	AL	ELECTRIC UTILITY		MOBILE	097	4911
7	GADSDEN	AL	COGENERATION		ETOWAH	055	4911
8	GORGAS	AL	ELECTRIC UTILITY		WALKER	127	4911
10	GREENE COUNTY	AL	ELECTRIC UTILITY		GREENE	063	4911
26	E. C. GASTON	AL	ELECTRIC UTILITY		SHELBY	117	4911
47	COLBERT	AL	ELECTRIC UTILITY		COLBERT	033	4911
50	WIDOWS CREEK	AL	ELECTRIC UTILITY		JACKSON	071	4911
51	DOLET HILLS P.S.	LA	ELECTRIC UTILITY		DE SOTO PAR	031	4911
54	JK SMITH	KY	ELECTRIC UTILITY	10207200027	CLARK	049	4911
56	CHARLES R. LOWMA	AL	ELECTRIC UTILITY		WASHINGTON	129	4911
59	PLATTE	NE	ELECTRIC UTILITY		HALL	079	4911
60	WHELAN ENERGY C	NE	ELECTRIC UTILITY	320010200	ADAMS	001	4911
87	ESCALANTE	NM	ELECTRIC UTILITY	P012M1	MC KINLEY	031	4911
108	HOLCOMB	KS	ELECTRIC UTILITY		FINNEY	055	4911
113	CHOLLA	AZ	ELECTRIC UTILITY	AZD043839547	NAVAJO	017	4911
116	OCOTILLO	AZ	ELECTRIC UTILITY		MARICOPA	013	4911
117	WEST PHOENIX	AZ	ELECTRIC UTILITY		MARICOPA	013	4911
118	SAGUARO	AZ	ELECTRIC UTILITY		PINAL	021	4911
120	YUMA AXIS	AZ	ELECTRIC UTILITY		YUMA	027	4911
124	DEMOSS PETRIE	AZ	ELECTRIC UTILITY		PIMA	019	4911
126	IRVINGTON	AZ	ELECTRIC UTILITY		PIMA	019	4911
127	OKLAUNION	TX	ELECTRIC UTILITY		WILBARGER	487	4911
130	CROSS GENERATING	SC	ELECTRIC UTILITY	0420-0003	BERKELEY	015	4911
136	SEMINOLE ELECTRIC	FL	ELECTRIC UTILITY	12	PUTNAM	107	4911
141	AGUA FRIA	AZ	ELECTRIC UTILITY		MARICOPA	013	4911
147	KYRENE	AZ	ELECTRIC UTILITY		MARICOPA	013	4911
160	APACHE STATION	AZ	ELECTRIC UTILITY	37	COCHISE	003	4911
165	GRDA COAL FIRED	OK	ELECTRIC UTILITY		MAYES	097	4911
167	LYNCH SES	AR	ELECTRIC UTILITY	6000087	PULASKI	119	4911
168	MOSES SES	AR	ELECTRIC UTILITY	620010	ST FRANCIS	123	4911
169	HARVEY COUCH	AR	ELECTRIC UTILITY	370004	LAFAYETTE	073	4911
170	LAKE CATHERINE	AR	ELECTRIC UTILITY	300011	HOT SPRING	059	4911
173	RITCHIE	AR	ELECTRIC UTILITY	540017	PHILLIPS	107	4911
201	THOMAS FITZHUGH	AR	ELECTRIC UTILITY	ARD043558675	FRANKLIN	047	4911
202	BAILEY	AR	ELECTRIC UTILITY		WOODRUFF	147	4911
203	MCCLELLAN	AR	ELECTRIC UTILITY		OUACHITA	103	4911

Right click to select and de-select records

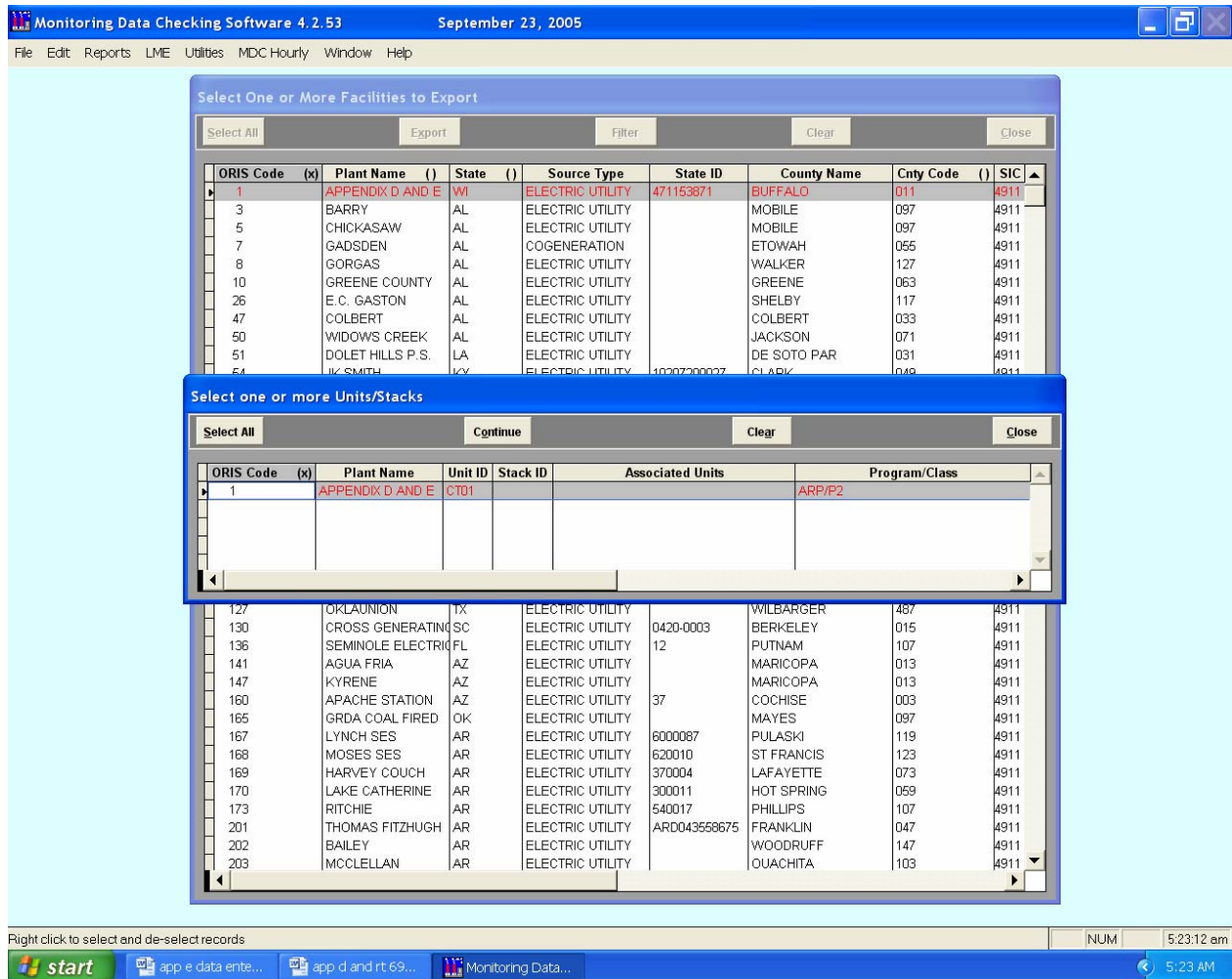
NUM 11:12:31 am

start Mail - Microsoft I... Monitoring Data... Document2 - M... test - Notepad NEENAH - Note... MDC Help 11:12 AM

On the "Export Options" screen, we selected both "Monitoring Plan Data" and "Quality Assurance Test Data" to be exported, since we had added both types of information to the MDC database. We identified the current EDR quarter (3rd quarter of 2005) as the quarter and year for which the data should be exported. We then chose the "Selected Units/Stacks" option and pressed "OK" to continue.

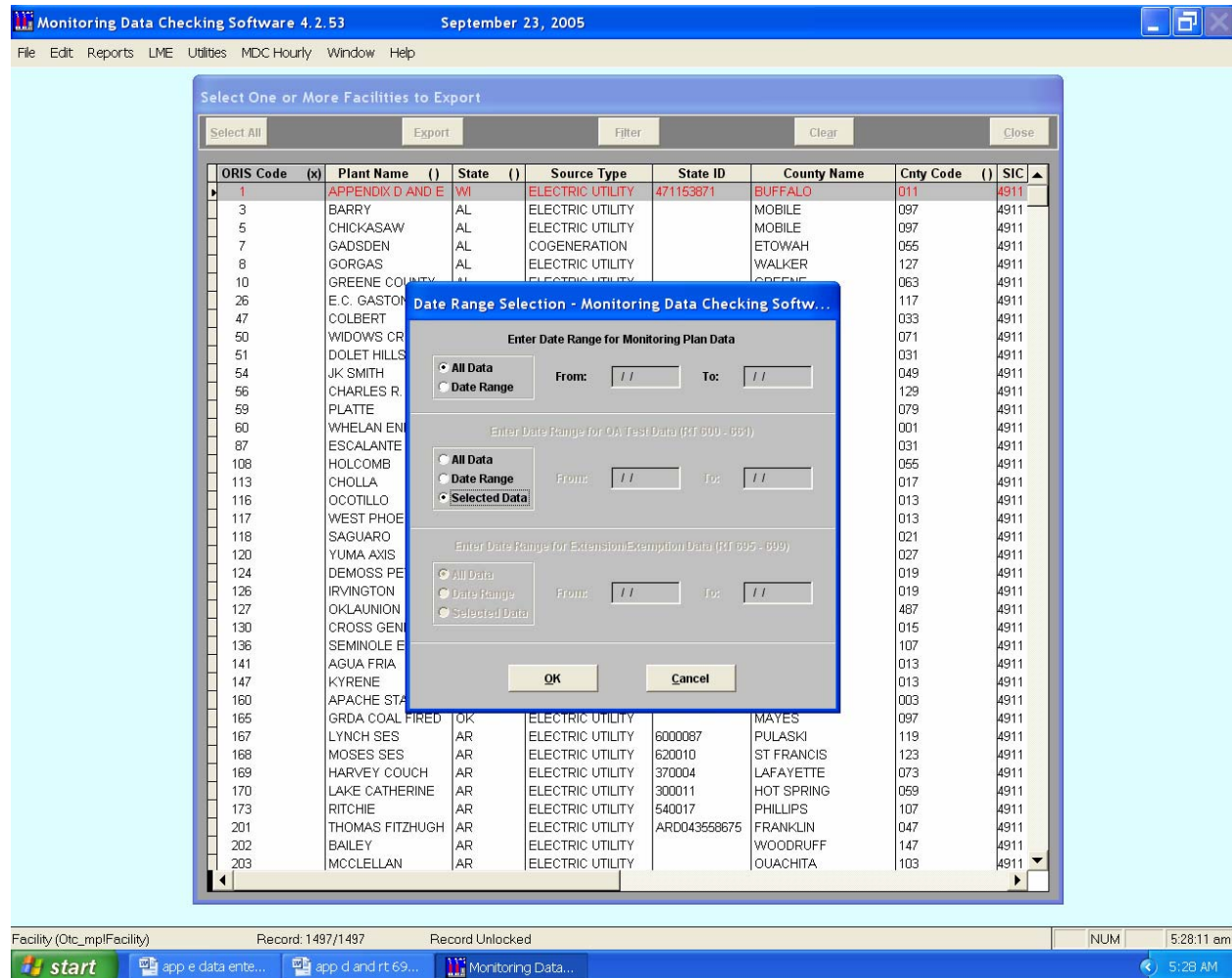


We highlighted Unit CT01 on the "Select One or More Units/Stacks" screen and clicked on "Continue".

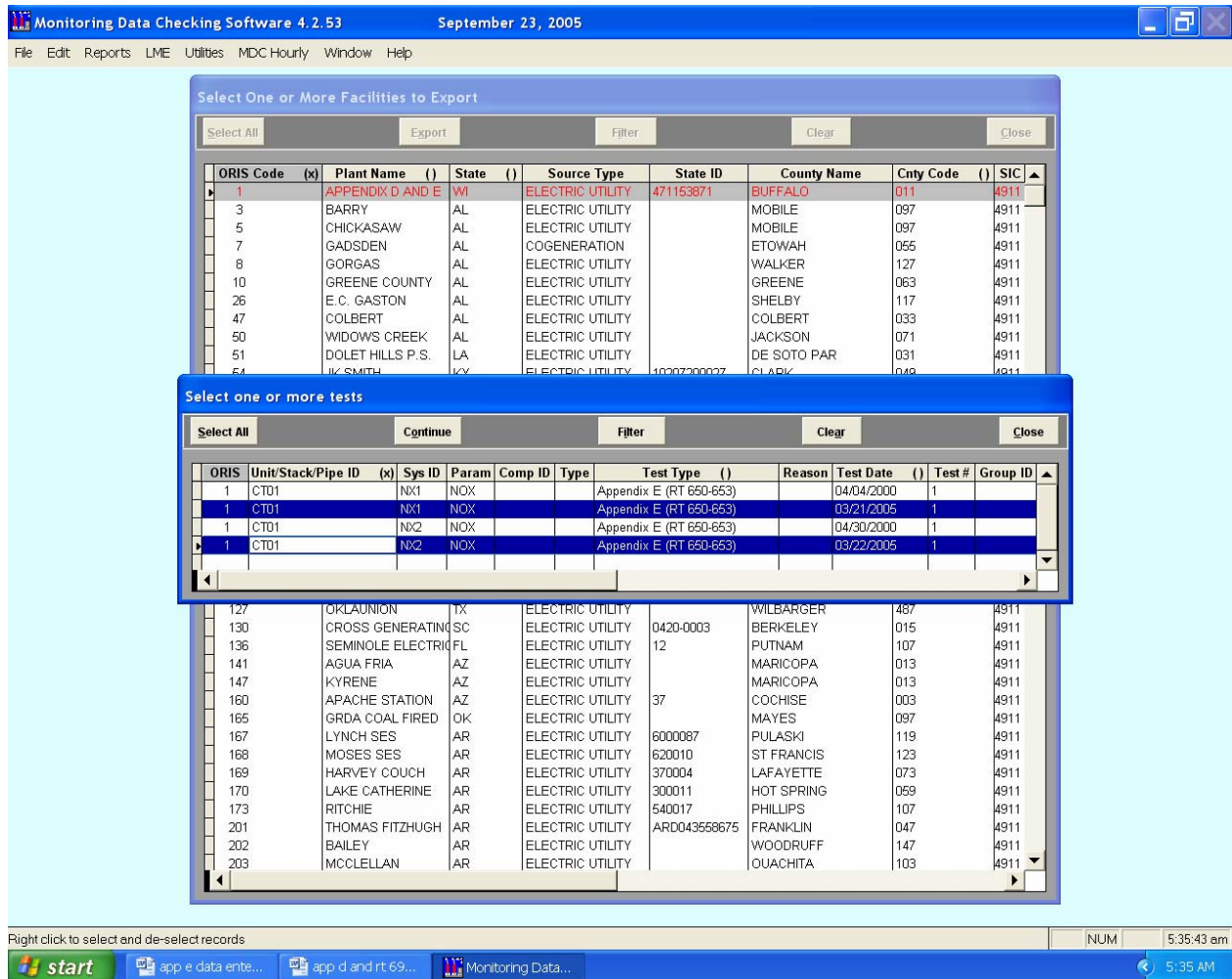


The next screen ("Date Range Selection") gave us choices about which data to export. For monitoring plan (MP) records, we could either have exported all of the MP data in the database or only MP records that were active during a specified date range. For QA test records, we had three choices: (1) export all QA tests in the database; or (2) export all QA tests performed within a specified date range; or (3) export only selected QA tests.

For the monitoring plan data, we chose the "All Data" option and for the QA tests we chose the "Selected Data" option. Because we chose "Selected Data" option for the QA tests, the "Select one or more tests" screen appeared.



We highlighted the 2005 Appendix E tests of systems NX1 and NX2 by right clicking on each one. Then we pressed "Continue".



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1000000013200 Save

102APPENDIX D AND E 5513915300471153871 ELECTRIC UTILITY 4911W1011 4406590882852

504CT01 CT 1897.020000508 110 787 254 0

505CT01 ARP P2Q 20000401 WI

506CT01 CT01 N

507CT01 20042001A 94.12002A 99.92003A 97.5 97.26F3HD

507CT01 20052002A 99.92003A 97.52004A 98.7 98.76F3HD

507CT01 20002000P 7.42001P 7.42002P 8.6 7.8PK3PR

507CT01 20012000A 4.62001P 7.42002P 8.6 6.9PK1HD

507CT01 20022000A 4.72001A 8.52002A 10.2 7.8PK3HD

507CT01 20032000A 4.72001A 8.52002A 10.2 7.8PK3HD

507CT01 20042001A 8.52002A 10.22003A 5.3 8.0PK3HD

507CT01 20052002A 10.22003A 5.32004A 2.3 5.9PK3HD

510CT01 D51C02D002 P DAHS ESC E-DAS ENR A0251 20000930

510CT01 D51G1UGAS P DAHS ESC E-DAS ENR A0251 20000508

510CT01 G01G1UGAS P GFFMORFGULTON STATHAN 96FF-1 99-2284 20000508

510CT01 D51NX1UNOX P DAHS ESC E-DAS ENR A0251 20000508

510CT01 D51NX2ANOX P DAHS ESC E-DAS ENR A0251 20000508

510CT01 D51O61UOILVP DAHS ESC E-DAS ENR A0251 20000508

510CT01 O01O61UOILVP OFFMPDPBROOKS B07GP 9906-29896-1-1 20000508

510CT01 D51S02D002 P DAHS ESC E-DAS ENR A0251 20000930

520CT01 UCM1C02 G-4A $U_C02 = (F\#(FC1) * F\#(HI1) / 385 * 44) / 2000$

520CT01 UFC1FC F-8 $F_C = 1040 * F\#(HG1) / F\#(HI1) + 1420 * F\#(HO1) / F\#(HI1)$

520CT01 UHG1HI D-6 $HI_RATE-GAS = S\#(G01-GS1) * GCV_GAS / 10 * * 6$

520CT01 UHI1HI D-15AHI $RATE-HR = (F\#(HG1) * T_G * F\#(HO1) * T_O) / T_U$

520CT01 UHO1HI D-8 $HI_RATE-OIL = S\#(O01-O01) * GCV_OIL / 10 * * 6$

520CT01 UMO1O1MLD-3 $MASS_OIL = S\#(O01-O01) * DENSITY_OIL$

520CT01 USM1S02 D-5 $SQ_RATE = 0.0006 * S\#(G01-GS1) * GCV_GAS / 10000$

520CT01 USM2S02 D-2 $SQ_RATE-OIL = 2 * F\#(MO1) * S\#OIL / 100$

530CT01 GNXX 15.000 0.055 00050800

530CT01 GNXXHF 15.000 0.055 00093023

530CT01 GNXXH 15.000 0.055 0005080002063023

530CT01 GNXX 42.000 0.163 00050800

530CT01 GNXXHF 42.000 0.163 00093023

530CT01 GNXXH 42.000 0.163 0005080002063023

535CT01 NW 193 P

536CT01 193 85

540CT01 GS1GAS PNG 21000.OHSCF UNXAGA3 U

540CT01 OS10ILVSL 16800.OGALLHUMELCRM U

556CT01 D51GS1 1222003061113 2003061114

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556CT01	DS10X1	1222003061113	2003061114
556CT01	DS10S1	1222003061113	2003061114
560CT01	20000430	2 2103NX1	1426.8 1628.6 0.134 0.137DSL
560CT01	20000404	1 31G4NX1	1585.0 1822.7 0.024 0.034PNG
560CT01	20050321	1 1002NX1	1185.6 1387.5 0.034 0.035PNG
560CT01	20000427	2 0101NX1	0.0 1232.0 0.140 0.140DIL
560CT01	20050322	2 2103NX1	1339.2 1595.6 0.154 0.146DSL
560CT01	20050321	1 0001NX1	0.0 1185.6 0.034 0.034PNG
560CT01	20000427	8 3104NX1	1652.0 1897.0 0.137 0.144DIL
560CT01	20050322	2 1102NX1	1153.3 1339.2 0.157 0.154DSL
560CT01	20000427	5 0101NX1	0.0 1232.0 0.140 0.140DIL
560CT01	20050321	1 2003NX1	1387.5 1614.0 0.035 0.038PNG
560CT01	20050322	2 3104NX1	1595.6 1919.9 0.146 0.144DSL
560CT01	20000404	1 11G2NX1	1211.5 1384.3 0.031 0.029PNG
560CT01	20000404	1 21G3NX1	1384.3 1585.0 0.029 0.024PNG
560CT01	20000404	1 01G1NX1	0.0 1211.5 0.031 0.031PNG
560CT01	20000404	4 31G4NX1	1585.0 1823.0 0.024 0.034PNG
560CT01	20000430	6 1102NX1	1232.0 1427.0 0.140 0.134DIL
560CT01	20000430	7 2103NX1	1427.0 1652.0 0.134 0.137DIL
560CT01	20000427	2 3104NX1	1652.0 1897.0 0.137 0.144DIL
560CT01	20000404	2 11G2NX1	1211.0 1384.0 0.031 0.029PNG
560CT01	20050321	1 3004NX1	1614.0 1832.3 0.038 0.039PNG
560CT01	20050322	2 0101NX1	0.0 1153.3 0.157 0.157DSL
560CT01	20000430	2 1102NX1	1214.9 1426.8 0.140 0.134DSL
560CT01	20000430	2 3104NX1	1628.6 1929.3 0.137 0.142DSL
560CT01	20000430	2 0101NX1	0.0 1214.9 0.140 0.140DSL
560CT01	20000404	3 21G3NX1	1384.0 1585.0 0.029 0.024PNG
560CT01	20050321	1 01G1NX2	0.0 1185.8 0.034 0.034PNG
560CT01	20050321	1 11G2NX2	1185.8 1387.5 0.034 0.035PNG
560CT01	20000404	1 01G1NX2	0.0 1211.5 0.031 0.031PNG
560CT01	20000404	1 31G4NX2	1585.0 1822.7 0.024 0.034PNG
560CT01	20050322	1 2006NX2	1339.2 1595.6 0.154 0.146DSL
560CT01	20050322	1 1005NX2	1153.3 1339.2 0.157 0.154DSL
560CT01	20050322	1 0004NX2	0.0 1153.3 0.157 0.157DSL
560CT01	20000404	1 11G2NX2	1211.5 1384.3 0.031 0.029PNG
560CT01	20000404	1 21G3NX2	1384.3 1585.0 0.029 0.024PNG
560CT01	20050321	1 21G3NX2	1387.5 1614.0 0.035 0.038PNG
560CT01	20050321	1 31G4NX2	1614.0 1832.3 0.038 0.039PNG
560CT01	20050322	1 3007NX2	1595.6 1919.9 0.146 0.144DSL
585CT01	CO2 GFF	PNGPPTS	20000508

NUM 6:08:43 pm

start app e data ente... MDC4 test2 - Notepad Monitoring Data... 6:08 PM

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Zoom: 100%

650CT01	NX105031808580503180922	2	0.032	1	1N	476.6	1191.5	1	0.000										
650CT01	NX105031813490503181413	2	0.035	2	1N	473.1	1182.7	1	0.000										
650CT01	NX105031814300503181454	2	0.036	3	1N	473.0	1182.6	1	0.000										
650CT01	NX105031815150503181539	2	0.036	1	2N	555.4	1388.4	1	0.000										
650CT01	NX105031815580503181623	2	0.035	2	2N	577.9	1386.9	1	0.000										
650CT01	NX105031816430503181707	2	0.035	3	2N	554.9	1387.1	1	0.000										
650CT01	NX105032113370503211400	2	0.039	1	3N	618.7	1614.0	1	0.000										
650CT01	NX105032114570503211520	2	0.038	2	3N	619.1	1615.2	1	0.000										
650CT01	NX105032115320503211555	2	0.037	3	3N	618.3	1612.9	1	0.000										
650CT01	NX105032116200503211643	2	0.039	1	4N	701.8	1830.8	1	0.000										
650CT01	NX105032116550503211718	2	0.039	2	4N	702.4	1832.3	1	0.000										
650CT01	NX105032117320503211755	2	0.039	3	4N	702.9	1833.8	1	0.000										
650CT01	NX205032209200503220943	2	0.158	1	1D	448.4	1156.6	1	0.000										
650CT01	NX205032212420503221305	2	0.158	2	1D	446.2	1151.2	1	0.000										
650CT01	NX205032213200503221343	2	0.156	3	1D	446.6	1152.1	1	0.000										
650CT01	NX205032214050503221428	2	0.155	1	2D	519.4	1340.1	1	0.000										
650CT01	NX205032214430503221506	2	0.153	2	2D	518.8	1338.5	1	0.000										
650CT01	NX205032215210503221544	2	0.154	3	2D	518.9	1339.0	1	0.000										
650CT01	NX205032216100503221633	2	0.147	1	3D	619.0	1596.9	1	0.000										
650CT01	NX205032216470503221710	2	0.146	2	3D	618.2	1595.3	1	0.000										
650CT01	NX205032217240503221747	2	0.146	3	3D	617.9	1594.5	1	0.000										
650CT01	NX205032218100503221833	2	0.144	1	4D	744.3	1920.4	1	0.000										
650CT01	NX205032218460503221909	2	0.143	2	4D	744.1	1920.0	1	0.000										
650CT01	NX205032219240503221947	2	0.144	3	4D	743.9	1919.4	1	0.000										
651CT01	NX10503181454	0.034	8644.0	1185.6	1N	1													
651CT01	NX10503181707	0.035	8644.0	1387.5	2N	1													
651CT01	NX10503211555	0.038	8644.0	1614.0	3N	1													
651CT01	NX10503211755	0.039	8644.0	1832.3	4N	1													
651CT01	NX20503221343	0.157	9120.0	1153.3	1D	1													
651CT01	NX20503221544	0.154	9120.0	1339.2	2D	1													
651CT01	NX20503221747	0.146	9120.0	1595.6	3D	1													
651CT01	NX20503221947	0.144	9120.0	1919.9	4D	1													
652CT01	OS105032209200503220943	1	23211.1	19317.0	448.4	3213.5GAL	7.223000LBGAL	1BTULB											
652CT01	OS105032212420503221305	2	23097.7	19317.0	446.2	3197.8GAL	7.223000LBGAL	1BTULB											
652CT01	OS105032213200503221343	3	23117.2	19317.0	446.6	3200.5GAL	7.223000LBGAL	1BTULB											
652CT01	OS105032214050503221428	1	26889.1	19317.0	519.4	3722.7GAL	7.223000LBGAL	1BTULB											
652CT01	OS105032214430503221506	2	26858.0	19317.0	518.8	3718.4GAL	7.223000LBGAL	1BTULB											
652CT01	OS105032215210503221544	3	26863.1	19317.0	518.9	3719.1GAL	7.223000LBGAL	1BTULB											
652CT01	OS105032216100503221633	1	32044.1	19317.0	619.0	4436.4GAL	7.223000LBGAL	1BTULB											

NUM 6:09:14 pm

start app e data ente... MDC4 test2 - Notepad Monitoring Data...

6:09 PM

The software prompted us to provide a filename and location to save the exported file, using a standard File Save window (see below). We saved the file and wrote down the name of it. Finally, we used a text editor to cut and paste the exported data into our 3rd quarter, 2005 EDR and submitted the file to EPA.

